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PROPOSAL

PFU OFFERINGS IN THE FUTURE NETWORK-CENTRIC COMPUTING ENVIROMENT

Submitted to

PFU

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Prepared by

INPUT

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PFU OFFERINGS IN THE FUTURE NETWORK-CENTRIC COMPUTING ENVIROMENT

I. BACKGROUND

PFU is very strong in the office computer market in Japan and has strengths in computer manufacturing, software development and maintenance.

PFU is aware that computing and electronics markets are changing. PFU is investigating new areas of technology (including both electronics and computers) that it might enter or expand in during the remainder of the 1990s.

INPUT has been requested to prepare a proposal describing how INPUT will assist PFU in this analysis.

II. SCOPE

The potential scope of PFU's request is very large. Based on recent study and analyses made by INPUT, INPUT recommends that the focus of this study be on the "network-centric computing" (NCC) market, i.e., the convergence of electronics, computing and communications to address important business problems.

NCC promises to be increasingly important in the remainder of the 1990s. NCC opportunities are especially pertinent for PFU:

- NCC represents a very large market opportunity.
- There are many unique and novel applications that will not be well served by existing vendors for some time to come, in INPUT's opinion. PFU will have a better chance of establishing itself in this kind of environment than in more traditional environments.

INPUT recommends that the study be divided into two phases:

- A comparison of NCC market requirements and PFU capabilities
- Developing a business plan

Phase One: Scope

In Phase One the following issues will be addressed:

- What is the general nature of the NCC market in 1995? In 1998? In 2000?
- What NCC applications will be especially important in 1995, 1998, 2000 (focussing on the U.S.)? What will be the approximate market size of each NCC application?

  What will be the strategies and methodologies for marketing NCC-oriented offerings, especially in the U.S.?
- What will be the nature of the principal NCC offerings (that is, hardware, network-based, communications, software, multimedia, services, hybrids, etc.)? What technologies will be critical to the success of the principal NCC offerings?
- What will be the common technology components for NCC applications in 1995, 1998, 2000? What technologies will be significantly more important in 1998 and 2000 than in 1995?
- Where will technology gaps emerge? How suited will PFU be to fill these gaps?
- Which existing PFU technologies are especially suited to be part of NCC offerings?
- What NCC-based offerings does INPUT recommend PFU focus on?

Phase One issues will be addressed by the work performed in this proposal.

These issues may be modified or added to, based on mutual agreement.

Phase Two: Scope

The following is a preliminary list of the issues that will be addressed in Phase Two. It is presented for information purposes. The list will be modified and expanded in the course of Phase One.

- What specific offerings should PFU develop?
- Where should products or productized services be developed?
- How should PFU fill its own technology gaps? (For example: licensing, acquisitions, joint ventures.)
- What distribution channels should be employed?
- In making changes, how can PFU reduce duplication and competition with Fujitsu's business?

INPUT assumes that it will assist PFU in developing a business plan that will cover all of the points above.

At the end of Phase One, INPUT will prepare a second proposal which will address the issues in Phase Two in detail.

III. METHODOLOGY AND SCHEDULE

A. Methodology

(The work described in this section addresses Phase One issues.)

At the beginning of the project INPUT and PFU will spend two days in a structured worksession. Prior to this worksession, INPUT will provide PFU with a detailed agenda for the meeting. The agenda will include information that PFU will supply to INPUT in the worksession.

The preliminary topics to be covered at the worksession include the following:

- INPUT will provide an overview of the NCC market and applications.
- INPUT will describe the underlying technologies and the types of gaps that are apparent.
- PFU will provide an overview of its technology capabilities. (INPUT will have requested assessments to be provided in particular areas.) The overview will include, where known, a self-assessment of strengths and weaknesses, as well as the basis for making these assessments.
- INPUT and PFU will jointly conduct an early assessment of PFU's capabilities. This will include, at a minimum, the following:
    - Opportunity areas where PFU appears to have capabilities.
    - Opportunity areas where PFU does not appear to have capabilities.
    - Opportunity areas where it is not clear if PFU has capabilities. (In these cases INPUT and PFU will conduct additional fact-finding and analysis, as required.)

This worksession will take place in INPUT's offices in Mt. View, California.

After the worksession INPUT will conduct additional research and analysis in order to address the questions raised under "Phase One: Scope". As part of this analysis, INPUT will prepare its own independent assessment of PFU's capabilities, strengths and weaknesses.

INPUT will prepare a draft report of its findings for review by PFU. After PFU's review, INPUT will make a presentation of its findings to PFU in Japan.

Comments that are received on the report and issues raised in the presentation will be incorporated into the final report.

B. Schedule

INPUT believes Phase One of the study can be completed in three months (13 weeks), as shown in the schedule below.

Week	Activity
1	INPUT prepares worksession agenda and information requirements
3	Worksession in California
4-7	Research and analysis
8	Preparation of draft report
9	Submission of draft report to PFU
10	Comments and questions received from PFU
11	Presentation in Japan
13	Submission of final report for Phase One

IV. PROJECT STAFFING

For this type of study, the staff of the project is critical for success. The Chief Analyst on the project will be Angela Hey. Thomas O'Flaherty, Vice President, Custom Research and Consulting and his staff will provide additional market and opportunity analysis.

Dr. Hey's experience and education makes her particularly suited for this assignment:

- AT&T Bell Labs: Department Chief -- in addition to technical assignments, she worked with technology start-up companies.
- General Magic: Managed technology partnerships.
- Calera Recognition Systems: Product marketing manager, launched company's first product.
- INPUT: Managed Client/Server and Internet Programs
- Ph.D (Management Science, Imperial College, London); MMath (Computing and Math, University of Waterloo); M.A. (Mathematics, Cambridge University)

Dr. Hey has conducted numerous technology opportunity studies.

Mr. O'Flaherty has directed over 250 market opportunity studies at INPUT. Recently, he led a team which examined applications-driven opportunities in global network-centric computing.

Other INPUT staff and consultants will be assigned to the project as required.

V. FEES

INPUT's fee for Phase One of this study is $49,000, which includes all expenses, including one trip to Japan. One-half of this fee ($24,500) is due and payable upon project authorization. The remainder of the fee is due on the submission of the draft report.

This proposal is valid for 30 days unless extended in writing.

VI. AUTHORIZATION

To authorize the project as specified, please sign and return one copy of this proposal, along with the initial fee. Upon acceptance by INPUT, a countersigned copy of the proposal will be returned to PFU.

AUTHORIZED BY: PFU	ACCEPTED BY: INPUT
Name	Name
Title	Title
Date	Date